Application No. 10/757,390
Reply to Office Action of October 6, 2006

IN THE CLAIMS

GTRADO

1-58 (Canceled).

59. (New) A semiconductor laser drive apparatus comprising:

nd the claims as follows:

a modulation signal supply unit configured to supply a modulation signal to a semiconductor laser, the modulation signal controlling a drive operation of the semiconductor laser;

a bias current supply unit configured to supply a fixed bias current to the semiconductor laser; and

a predetermined current supply unit configured to supply a predetermined current that is less than a light emission threshold current to the semiconductor laser at an arbitrary timing independent from the modulation signal controlling the drive operation of the semiconductor laser.

60. (New) A semiconductor laser drive apparatus comprising:

a modulation signal supply unit configured to supply a modulation signal to a semiconductor laser, the modulation signal controlling a drive operation of the semiconductor laser;

a bias current supply unit configured to supply a fixed bias current to the semiconductor laser; and

a predetermined current supply unit configured to supply a predetermined current that is less than a light emission threshold current to the semiconductor laser based on a predetermined current supply timing signal controlling a supply timing for supplying the

predetermined current which signal is independent from a drive timing signal controlling a drive timing for driving the semiconductor laser.

61. (New) A semiconductor laser drive apparatus comprising:

a modulation signal supply unit configured to supply a modulation signal to a semiconductor laser, the modulation signal controlling a drive operation of the semiconductor laser;

a bias current supply unit that is arranged parallel to the modulation signal supply unit and configured to supply a fixed bias current to the semiconductor laser; and

a control current supply unit that is arranged parallel to the modulation signal supply unit and configured to supply a control current to the semiconductor laser based on a switch operation controlled by a threshold-on signal, an amount of the control current controlled by a sample hold circuit which is controlled by a sample-hold signal independent from the modulation signal and samples a light emission threshold current of the semiconductor laser.

62. (New) A semiconductor laser driving method for driving a semiconductor laser according to a modulation signal, the method comprising the step of:

supplying a bias current signal to the semiconductor laser;

supplying the modulation signal to the semiconductor laser; and

supplying a predetermined current that is less than a light emission threshold current to the semiconductor laser at an arbitrary timing independent from the modulation signal controlling the drive operation of the semiconductor laser.

63. (New) A semiconductor laser driving method for driving a semiconductor laser according to a modulation signal, the method comprising the step of:

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supplying a bias current signal to the semiconductor laser;

supplying a predetermined current that is less than a light emission threshold current

based on a predetermined current supply timing signal for controlling a supply timing of the

predetermined current, the predetermined current supply timing signal being independent

from a drive timing signal controlling a drive timing for driving the semiconductor laser; and

supplying the modulation signal to the semiconductor laser.

64. (New) The semiconductor laser drive apparatus according to claim 61, wherein

the sample hold circuit is controlled by a sample-hold signal inputted from an external of the

semiconductor laser drive apparatus.

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